CLAIMS

1. An substantially pure polypeptide selected from the group consisting of:
   (a) a polypeptide comprising the amino acid sequence of SEQ ID NO: 16;
   (b) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16 in which one or more amino acids are substituted, deleted, inserted, and/or added and that has a biological activity equivalent to a protein consisting of the amino acid sequence of SEQ ID NO: 16; and
   (c) a polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide consisting of the nucleotide sequence of SEQ ID NO: 15, wherein the polypeptide has a biological activity equivalent to a polypeptide consisting of the amino acid sequence of any one of SEQ ID NO: 16
2. An isolated polynucleotide encoding the polypeptide of claim 1.
3. A vector comprising the polynucleotide of claim 2.
4. A host cell harboring the polynucleotide of claim 2 or the vector of claim 3.
5. A method for producing the polypeptide of claim 1, said method comprising the steps of:
   (a) culturing the host cell of claim 4;
   (b) allowing the host cell to express the polypeptide; and
   (c) collecting the expressed polypeptide.
6. An antibody binding to the polypeptide of claim 1.
7. A polynucleotide that is complementary to the polynucleotide of claim 2 or to the complementary strand thereof and that comprises at least 15 nucleotides.
8. An antisense polynucleotide or small interfering RNA against the polynucleotide of claim 2.
9. The antisense polynucleotide of claim 8, wherein the nucleotide sequence thereof comprises the nucleotide sequence of SEQ ID NO: 11.
10. The small interfering RNA of claim 8, wherein the sense strand thereof comprises the nucleotide sequence of SEQ ID NO: 13.
11. A method for diagnosing a cell proliferative disease, said method comprising the steps of:
   (a) detecting the expression level of the gene encoding the amino acid sequence of SEQ ID NO: 16 in a biological sample of specimen; and
   (b) relating an elevation of the expression level to the disease.
12. The method of claim 11, wherein the expression level is detected by any one of the method select from the group consisting of:
   (a) detecting the mRNA encoding the amino acid sequence of SEQ ID NO: 16,

(b) detecting the protein comprising the amino acid sequence of SEQ ID NO: 16, and
(c) detecting the biological activity of the protein comprising the amino acid sequence of SEQ ID NO: 16

13. A method of screening for a compound for treating a cell proliferative disease, said method comprising the steps of:
(a) contacting a test compound with a polypeptide selected from the group consisting of:
(1) a polypeptide comprising the amino acid sequence of SEQ ID NO: 16;
(2) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16 in which one or more amino acids are substituted, deleted, inserted, and/or added and that has a biological activity equivalent to a protein consisting of the amino acid sequence of SEQ ID NO: 16; and
(3) a polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide consisting of the nucleotide sequence of SEQ ID NO: 15, wherein the polypeptide has a biological activity equivalent to a polypeptide consisting of the amino acid sequence of SEQ ID NO: 16;
(b) detecting the binding activity between the polypeptide and the test compound; and
(c) selecting a compound that binds to the polypeptide.

14. A method of screening for a compound for treating a cell proliferative disease, said method comprising the steps of:
(a) contacting a candidate compound with a cell expressing a polynucleotide comprising the nucleotide sequence of SEQ ID NO: 15; and
(b) selecting a compound that reduces the expression level of the polynucleotide comparison with the expression level detected in the absence of the test compound.

15. A method of screening for a compound for treating a cell proliferative disease, said method comprising the steps of:
(a) contacting a test compound with a polypeptide selected from the group consisting of:
(1) a polypeptide comprising the amino acid sequence of SEQ ID NO: 16;
(2) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16 in which one or more amino acids are substituted, deleted, inserted, and/or added and that has a biological activity equivalent to a protein consisting of the amino acid sequence of SEQ ID NO: 16; and
(3) a polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide consisting of the nucleotide sequence of SEQ ID

NO: 15, wherein the polypeptide has a biological activity equivalent to a polypeptide consisting of the amino acid sequence of SEQ ID NO: 16;

(b) detecting the biological activity of the polypeptide of step (a); and

(c) selecting a compound that suppresses the biological activity of the polypeptide in comparison with the biological activity detected in the absence of the test compound.

16. The method of claim 15, wherein the biological activity is cell-proliferating activity.

17. A method of screening for compound for treating cell proliferative disease, said method comprising the steps of:

a) contacting a candidate compound with a cell into which a vector comprising the transcriptional regulatory region of a marker gene and a reporter gene that is expressed under the control of the transcriptional regulatory region has been introduced, wherein the marker genes comprising nucleotide sequence of SEQ ID:NO 15

b) measuring the activity of said reporter gene; and

c) selecting a compound that reduces the expression level of said reporter gene in comparison with the expression level of said reporter gene detected in the absence of the test compound.

18. A method of any one of claim 11 to 17, wherein the cell-proliferative disease is cancer.

19. A composition for treating a cell proliferative disease, said composition comprising a pharmaceutically effective amount of an antisense polynucleotide or small interfering RNA against a polynucleotide encoding a polypeptide selected from the group consisting of:

(a) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16;

(b) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16 in which one or more amino acids are substituted, deleted, inserted, and/or added and that has a biological activity equivalent to a protein consisting of the amino acid sequence of SEQ ID NO: 16; and

(c) a polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide consisting of the nucleotide sequence of SEQ ID NO: 15, wherein the polypeptide has a biological activity equivalent to a polypeptide consisting of the amino acid sequence of SEQ ID NO: 16

as an active ingredient, and a pharmaceutically acceptable carrier.

20. A composition for treating a cell proliferative disease, said composition comprising a pharmaceutically effective amount of an antibody against a polypeptide selected from the group consisting of:

(a) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16;
(b) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16 in which one or more amino acids are substituted, deleted, inserted, and/or added and that has a biological activity equivalent to a protein consisting of the amino acid sequence of SEQ ID NO: 16; and
(c) a polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide consisting of the nucleotide sequence of SEQ ID NO: 15, wherein the polypeptide has a biological activity equivalent to a polypeptide consisting of the amino acid sequence of SEQ ID NO: 16
as an active ingredient, and a pharmaceutically acceptable carrier.

21. A composition for treating a cell proliferative disease, said composition comprising a pharmaceutically effective amount of the compound selected by the method of any one of claims 13 to 17 as an active ingredient, and a pharmaceutically acceptable carrier.

22. The composition of any one of claims 19 to 21, wherein the cell proliferative disease is cancer.

23. A method for treating a cell proliferative disease, said method comprising the step of administering a pharmaceutically effective amount of an antisense polynucleotide or small interfering RNA against a polynucleotide encoding a polypeptide selected from the group consisting of:
(1) a polypeptide comprising the amino acid sequence of SEQ ID NO: 16;
(2) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16 in which one or more amino acids are substituted, deleted, inserted, and/or added and that has a biological activity equivalent to a protein consisting of the amino acid sequence of SEQ ID NO: 16; and
(3) a polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide consisting of the nucleotide sequence of SEQ ID NO: 15, wherein the polypeptide has a biological activity equivalent to a polypeptide consisting of the amino acid sequence of SEQ ID NO: 16.

24. A method for treating a cell proliferative disease, said method comprising the step of administering a pharmaceutically effective amount of an antibody against a polypeptide selected from the group consisting of:
(a) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16;
(b) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16 in which one or more amino acids are substituted, deleted, inserted, and/or added and that has a biological activity equivalent to a protein consisting of the amino acid sequence of SEQ ID NO: 16; and

(c) a polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide consisting of the nucleotide sequence of SEQ ID NO: 15, wherein the polypeptide has a biological activity equivalent to a polypeptide consisting of the amino acid sequence of SEQ ID NO: 16.

25. A method for treating a cell proliferative disease, said method comprising the step of administering a pharmaceutically effective amount of a compound selected by the method of any one of claims 13 to 15.

26. The method of any one of claims 23 to 25, wherein the cell proliferative disease is cancer.

27. A method for treating or preventing a cancer, said method comprising the step of administering a pharmaceutically effective amount of a polypeptide selected from the group consisting of (a)-(c), or a polynucleotide encoding the polypeptide:

(a) a polypeptide comprising the amino acid sequence of SEQ ID NO: 16 or fragment thereof;

(b) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16 in which one or more amino acids are substituted, deleted , inserted, and/or added and that has a biological activity equivalent to a protein consisting of the amino acid sequence of SEQ ID NO: 16, or fragment thereof;

(c) a polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide consisting of the nucleotide sequence of SEQ ID NO: 15, wherein the polypeptide has a biological activity equivalent to a polypeptide consisting of the amino acid sequence of SEQ ID NO: 16, or fragment thereof.

28. A method for inducing an anti tumor immunity, said method comprising the step of contacting a polypeptide selected from the group consisting of (a)-(c) with antigen presenting cells:

(a) a polypeptide comprising the amino acid sequence of SEQ ID NO: 16, or fragment thereof;

(b) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16 in which one or more amino acids are substituted, deleted, inserted, and/or added and that has a biological activity equivalent to a protein consisting of the amino acid sequence of SEQ ID NO: 16, or fragment thereof;

(c) a polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide consisting of the nucleotide sequence of SEQ ID NO: 15, wherein the polypeptide has a biological activity equivalent to a polypeptide consisting of the amino acid sequence of SEQ ID NO: 16, or

fragment thereof.

29. The method for inducing an anti tumor immunity of claim 28, wherein the method further comprising the step of administering the antigen presenting cells to a subject.
30. A pharmaceutical composition for treating or preventing a cancer, said composition comprising a pharmaceutically effective amount of polypeptide selected from the group of (a)-(c), or a polynucleotide encoding the polypeptide:
    (a) a polypeptide comprising the amino acid sequence of SEQ ID NO: 16, or fragment thereof;
    (b) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 16 in which one or more amino acids are substituted, deleted , inserted, and/or added and that has a biological activity equivalent to a protein consisting of the amino acid sequence of SEQ ID NO: 16, or fragment thereof;
    (c) a polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide consisting of the nucleotide sequence of SEQ ID NO: 15, wherein the polypeptide has a biological activity equivalent to a polypeptide consisting of the amino acid sequence of SEQ ID NO: 16, or fragment thereof.